## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

- 1. (Currently amended) A method of producing an organic material wherein the material having fire-retardant and/or fire-suppressant and/or thermal barrier properties and that multiplies through a process of germination and wherein the method is characterised therein that it includes a two-stage fermentation process, the method comprising the steps of preparing a starter nutrient medium in which an organic bacterial fungus consortium will grow; adding a starter culture of the organic bacterial fungus consortium to the nutrient medium; permitting the mixture of nutrient medium and bacterial fungus culture consortium to undergo a first stage fermentation process; transferring the mixture to a fermentation container; allowing the mixture to undergo a second stage fermentation process until the organic material bacterial fungus consortium has germinated fully to form an organic fire-retardant and/or fire-suppressant and/or thermal barrier material and harvesting the organic material.
- 2. (Currently amended) The method as claimed in claim 1 characterised therein that wherein the nutrient medium is an infusion of plant material and water.
- 3. (Currently amended) The method as claimed in claim 2 characterised therein that wherein the nutrient medium is an infusion of tealeaves and water, wherein the tealeaves are selected from a group including, although not limited to, Cyclopia Intermedia, Matricaria Recutita, Aspalathus linearis and/or Lavender.

- 4. (Currently amended) The method as claimed in claim [[1]]2 characterised therein that wherein the organic bacterial fungus consortium is a fungus colony consortium of the specific plant material to be infused during preparation of the nutrient medium.
- 5. (Currently amended) The method as claimed in claim 1 characterised therein that wherein the method includes the further step of introducing an acidic medium into the starter nutrient medium for reducing lowering pH of the same medium to favor growth of the organic bacterial fungus consortium.
- 6. (Currently amended) The method as claimed in claim 5 characterised therein that wherein the acidic medium is distilled vinegar.
- 7. (Currently amended) The method as claimed in claim 5 characterised therein that wherein the acidic medium is acidic nutrient medium from a previous fermentation process.
- 8. (Currently amended) The method as claimed in claim 1 characterised therein that wherein the first stage fermentation process occurs for a period of between 3 and 5 days, while the second stage fermentation process occurs for a period of between 10 and 12 days, or until the organic material has grown into a sheet of approximately from 8mm to 10mm thick.
- 9. (Currently amended) The method as claimed in claim 1 characterised therein that wherein the first stage fermentation process occurs in the absence of direct sunlight.

- 10. (Currently amended) The method as claimed in claim 1 characterised therein that wherein the mixture remains undisturbed during the first stage fermentation process.
- 11. (Currently amended) The method as claimed in claim 1 characterised therein that wherein the nutrient medium is maintained at a temperature ranging between 20°C and 30°C, and optimally at a temperature range of 23°C 28°C, during both the first and the second stage fermentation processes.
- 12. (Currently amended) The method as claimed in claim 1

  characterised therein that wherein the fermentation container is an elongate elongated and substantially cylindrical container.
- 13. (Currently amended) The method as claimed in claim 1 characterised therein that wherein the fermentation container is a fermentation pipe having a diameter in the order of 100mm, and a length in the order of 6m.
- 14. (Currently amended) The method as claimed in claim 1 characterised therein that wherein the mixture of nutrient medium and organic bacterial fungus culture consortium is introduced into the fermentation container such that [[the]] a surface area of the nutrient medium is below [[the]] a horizontal centerline of the cylindrical fermentation container, and more particularly, such that the surface area of the nutrient medium is between 8mm and 10mm below the horizontal centerline of the cylindrical fermentation container, the arrangement being such that the sheet material is permitted to germinate form into a sheet until [[it]] the sheet has reached the horizontal centerline of the fermentation container, after which [[it]] the sheet is harvested, at which point the sheet material should have a thickness of between 8mm and 10mm.

15-18. (Cancelled).

- 19. (Currently amended) The method as claimed in claims claim 1 or 15 characterised therein that wherein the method includes the further step of, subsequent to germination and harvesting of the organic sheet material, utilizing the then nutrient medium resulting from the fermentation process as the starter nutrient medium for growing a second organic sheet additional material, wherein this further step being characterised therein that it does not require addition of [[a]] an external starter culture of the organic bacterial fungus consortium to the nutrient medium.
- 20. (Currently amended) The method as claimed in claim 19 characterised therein that wherein the process of harvesting the organic sheet material and utilizing the then nutrient medium resulting from the fermentation process as the starter nutrient medium for growing another organic sheet additional material, without the need for adding additional an external starter culture to the nutrient medium, is repeated a number of times.
- 21. (Currently amended) The method as claimed in claims claim 1 or 15 characterised therein that wherein the material is dried to form a dry sheet of the material.
- 22. (Currently amended) The method as claimed in claims claim 1 or 15 characterised therein that wherein the material is pulverised and mixed with water to form a gel.

23-30. (Cancelled).

- 31. (New) The method as claimed in claim 3 wherein the tealeaves are selected from the group consisting of Cyclopia Intermedia, Matricaria Recutita, Aspalathus linearis and Lavender.
- 32. (New) The method as claimed in claim 11 wherein the temperature range is from 23°C to 28°C.
- 33. (New) The method as claimed in claim 14 wherein the surface area of the nutrient medium is between 8mm and 10mm below the horizontal centerline of the cylindrical fermentation container.
- 34. (New) An organic material having fire-retardant and/or fire-suppressant and/or thermal barrier properties produced according to the method of claim 1.